Mr. Walter C. Matthews
Hamilton Foundry & Machine Company
Decatur Casting Division
822 Dayton Avenue
Decatur, Indiana 46733

Re: Significant Source Modification No:
SSM 001-10839-00002

Dear Mr. Matthews:

Hamilton Foundry & Machine Company, Decatur Casting Division, applied for a Part 70 operating permit on July 15, 1996 for a gray iron foundry. An application to modify the source was received on April 5, 1999. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

The modification consists of the construction and operation of a new castings cleaning machine which will replace a castings cleaning machine that was at the end of its useful lifetime and it was removed from service on April 9, 1999. The baghouse used for the control of particulate matter from the previous machine will remain in service and it will be connected to the new machine for continued particulate matter control. The new castings cleaner will have a greater maximum capacity than that of the previous machine, increasing from 3.0 tons of gray iron castings cleaned per hour (previous machine) to 7.5 tons of gray iron castings cleaned per hour (new machine).

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Michael Hirtler at (973) 575-2555, extension 3229, or at (800) 451-6027 press 0 and ask for extension 3-6878.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
MH / EVP
cc: File - Adams County
U.S. EPA, Region V
Adams County Health Department
Air Compliance Section Inspector - Jim Thorpe
Compliance Data Section - Jerri Curless
Administrative and Development - Janet Mobley
Technical Support and Modeling - Nancy Landau

PART 70 SIGNIFICANT SOURCE MODIFICATION
OFFICE OF AIR MANAGEMENT

Hamilton Foundry & Machine Company
Decatur Casting Division
822 Dayton Avenue
Decatur, Indiana 46733

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Significant Source Modification No.: SSM 001-10839-00002	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary gray iron foundry.

Responsible Official:	Walter C. Matthews
Source Address:	822 Dayton Avenue, Decatur, Indiana 46733
Mailing Address:	822 Dayton Avenue, Decatur, Indiana 46733
Phone Number:	(219) 724-3191
SIC Code:	3321
County Location:	Adams
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) One (1) Pangborn 34 CF Rotoblast castings cleaner with a maximum capacity of 7.5 tons of gray iron castings per hour, with particulate matter controlled by an existing baghouse identified as E3 exhausting at one (1) stack identified as S-8. This facility replaces the castings cleaner identified as Pangborn 14 CF Tumblast which had a maximum capacity of 3.0 tons of gray iron castings per hour, with particulate matter controlled by baghouse E3 exhausting at one (1) stack identified as S-8.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Significant Source Modification [326 IAC 2-7-10.5(h)] [326 IAC 2-7-2(d)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

However, in the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

(a) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification (SSM) will be included in the Title V draft.

(b) If the Title V permit has gone through final EPA proposal and would be issued ahead of the SSM, then the SSM will go through a concurrent forty-five (45) day EPA review. Then the SSM will be incorporated into the final Title V permit at the time of issuance.

(c) If the Title V permit has not gone through final EPA review and would be issued after the SSM is issued, then the SSM would be added to the proposed Title V permit, and the Title V permit will be issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this approval, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this approval. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this approval. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

C.9 Maintenance of Monitoring Equipment [IC 13-14-1-13]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.10 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.11 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.12 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within “normal” parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 Annual Emission Statement [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.16 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this approval;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from a approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

(c) Unless otherwise specified in this approval, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(a) One (1) Pangborn 34 CF Rotoblast castings cleaner with a maximum capacity of 7.5 tons of gray iron castings per hour, with particulate matter controlled by an existing baghouse identified as E3 exhausting at one (1) stack identified as S-8. This facility replaces the castings cleaner identified as Pangborn 14 CF Tumblast which had a maximum capacity of 3.0 tons of gray iron castings per hour, with particulate matter controlled by baghouse E3 exhausting at one (1) stack identified as S-8.

Emission Limitations and Standards

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the Pangborn 34 CF Rotoblast castings cleaner shall not exceed 15.8 pounds per hour when operating at a process weight rate of 7.5 tons of metal per hour, as determined with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 326 IAC 2-2 and 40 CFR 52.21, the following shall apply:

(a) Particulate matter (PM) emitted from the Pangborn 34 CF Rotoblast castings cleaner baghouse, identified as E3, shall be less than 0.791 pounds per ton of castings processed in the cleaner. This factor is required to limit potential to emit PM to less than 26.0 tons per 12 consecutive month period, based on the maximum facility production rate of 65,700 tons of gray iron castings cleaned per 12 consecutive month period;

(b) Particulate matter with an aerodynamic diameter at or below 10 microns (PM-10) emitted from the Pangborn 34 CF Rotoblast castings cleaner baghouse, identified as E3, shall be less than 0.457 pounds per ton of castings processed in the cleaner. This factor is required to limit potential to emit PM-10 to less than 15.0 tons per 12 consecutive month period, based on the maximum facility production rate of 65,700 tons of gray iron castings cleaned per 12 consecutive month period;

(c) The Pangborn 34 CF Rotoblast castings cleaner baghouse, identified as E3, shall be in operation at all times when the cleaning facility is in operation.

(d) The castings cleaner identified as Pangborn 14 CF Tumblast, with a maximum capacity of 3.0 tons of gray iron castings per hour, is removed from service. The respective contemporaneous PM and PM10 emissions decrease due to the removal of the castings cleaner is 1.1 tons per year and 0.1 tons per year.

These conditions, including the contemporaneous emissions decrease, limit the potential to emit PM and PM10 to less than twenty-five (25) and fifteen (15) tons per 12 consecutive month period, respectively. Compliance with these requirements make 326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration) not applicable to this modification.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the Pangborn 34 CF Rotoblast castings cleaner and its control device.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

An initial compliance stack test shall be conducted within 60 days after achieving the maximum production rate, but no later than 180 days after initial start-up. The Permittee shall perform PM and PM-10 testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner, to demonstrate compliance with Conditions D.1.1 and D.1.2. PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Visible Emissions Notations

(a) Daily visible emission notations of the baghouse E3 stack exhaust shall be performed at least once per shift during normal daylight operations when the Pangborn 34 CF Rotoblast castings cleaner is operating and exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across baghouse E3 at least once per shift during normal daylight hours when the Pangborn 34 CF Rotoblast castings cleaner is in operation and when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the Pangborn 34 CF Rotoblast castings cleaner when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain records of daily visible emission notations of the castings cleaner baghouse stack exhaust.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure; and

(B) Cleaning cycle: frequency and differential pressure.

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures.

(5) Operator standard operating procedures (SOP).

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

(c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

Except for the reporting requirements of Condition C.7 associated with initial compliance testing of Condition D.1.4, there are no specific reporting requirements for this facility.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Hamilton Foundry & Machine Company, Decatur Casting Division
Source Address: 822 Dayton Avenue, Decatur, Indiana 46733
Mailing Address: 822 Dayton Avenue, Decatur, Indiana 46733
Source Modification No.: SSM 001-10839-00002

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: Hamilton Foundry & Machine Company, Decatur Casting Division PHONE NO. (219) 724 - 3191
LOCATION: (CITY AND COUNTY) Decatur, Adams County
PERMIT NO. SSM 001-10839-00002 AFS PLANT ID: 00002 AFS POINT ID: 01 INSP: Jim Thorpe
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:
_____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 19____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Indiana Department of Environmental Management
Office of Air Management

Addendum to the
Technical Support Document for a Significant Source Modification
to a Part 70 Operating Permit

Source Name:	Hamilton Foundry & Machine Company Decatur Casting Division
Source Location:	822 Dayton Avenue, Decatur, Indiana 46733
County:	Adams
SIC Code:	3321
Significant Source Modification No.:	SSM 001-10839-00002
Permit Reviewer:	Michael Hirtler / EVP

On June 10, 1999, the Office of Air Management (OAM) had a notice published in the Decatur Daily Democrate, Decatur, Indiana, stating that Hamilton Foundry & Machine Company, Decatur Casting Division had applied for a significant source modification to a Part 70 operating permit. The significant source modification was for the construction and operation of a new castings cleaning machine to be connected to an existing baghouse for particulate matter control. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On July 6, 1999, Decatur Casting Division submitted comments on the proposed significant source modification permit. The summary of the comments and corresponding responses is as follows:

Comment:

The various pages refer to “Muncie, Indiana”. Please revise this to Decatur, Indiana.

Response:

The header information found at the top of each page of the permit has been corrected to reflect Decatur, Indiana.

Comment:

The records keeping description in Section D.1.9(b)(1)(B) indicates that there is a cleaning method where the cycle frequency depends on pressure drop. Dust collector E3 serving the Pangborn cleaner has a mechanical shaker type cleaning attachment for the dust collector bags. The regular schedule for bag cleaning is each day. There is no mechanical shaker activation based on pressure drop.

Response:

Record keeping condition D.1.9(b)(1)(B), page 18 of 22, does not require installation or use of any mechanical device that results in the automatic cleaning of the dust collector based on a prescribed pressure drop. Instead, the record keeping condition simply requires the daily recording of the frequency (i.e., how often) the dust collector is cleaned and the differential pressure associated with each cleaning cycle (i.e., record the pressure before and after the cleaning cycle). There will be no changes to this condition in the draft permit due to this comment.

Comment:

Section D.1.4 contains a requirement for an initial compliance stack test. We would appreciate the deletion of this test requirement. The Indiana Office of Air Management is working on the facility's Title V application. It is assumed that there will be a regular Title V permit stack test schedule for all of the pollution control devices in use. Since dust collector E3 is connected to all of the casting cleaning units, it would be preferable to cover the stack test work as a part of Title V compliance.

Response:

The OAM has policies regarding compliance stack testing for purposes of construction permitting and for sources required to obtain a Title V or Federally Enforceable State Operating Permit (FESOP). While the proposed source will be issued a Title V operating permit in the future, criteria for Title V permit stack testing is not the same criteria applied to construction permits. The proposed Pangborn castings cleaning unit has potential uncontrolled particulate matter (PM) emissions in excess of 40 tons per year, and the unit must utilize a control device (i.e., dust collector E3) to achieve compliance with the PM emission limit of 326 IAC 6-3-2 (see Appendix A to original Technical Support Document). For such an emission unit, OAM policy requires that an initial compliance stack test be conducted in accordance with established procedures. Therefore, there will be no changes to this condition in the draft permit due to this comment. Should it be determined that Title V permit compliance testing is also applicable to this emission unit based upon the Title V permit stack testing policy, the source may be able to utilize the construction permit compliance test to fulfill first-time compliance testing of the Title V permit.

Comment:

Section D.1.6 contains a requirement to maintain the dust collector pressure drop between 2.0 and 6.0 inches of water during operations. Dust collector E3 has no control system that mechanically adjusts the bad cleaning cycle based on pressure drop changes. In addition, the dust collectors normally run continuously throughout the work day. There is a possibility that the operating range could be different than the 2 to 6 inches limit based on the impact of reduced dust loading in the input air flow during lunch breaks, equipment down time for maintenance or repair, etc. Please adjust the pressure range to reflect that this range situation represents operations under full dust loading.

Response:

Condition D.1.6 (Parametric Monitoring), page 18 of 22, requires the total static pressure drop to be recorded at least once per shift during normal daylight hours when the castings cleaner is in operation and when venting to the atmosphere. The condition also requires the pressure drop to be maintained within the range of 2.0 to 6.0 inches of water or another range established by stack test. The intent of the condition is to ensure proper operation of the control device such that compliance with the PM emission limit is maintained. Operation outside of the range is not considered a permit violation; rather, the range serves as an indicator to the source. Should the source record a pressure drop outside of the established range, it needs to check the control system for potential failure or a problem. If a problem is identified, it needs to be corrected according to the contingency and response steps, and time frame for completion, established by the source in their Compliance Response Plan (i.e., Condition C.12, page 10 of 22). Anticipated normal situations where the source will operate outside of this range can be established and explained in the Compliance Response Plan (e.g., less than full dust loading conditions occurring during lunch breaks, equipment down time for maintenance or repair, etc.). Therefore, there will be no changes to this condition in the draft permit due to this comment.

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Significant Source Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	**Hamilton Foundry & Machine Company Decatur Casting Division**
Source Location:	**822 Dayton Avenue, Decatur, Indiana 46733**
County:	**Adams**
SIC Code:	**3321**
Significant Source Modification No.:	**SSM 001-10839-00002**
Permit Reviewer:	**Michael Hirtler / EVP**

The Office of Air Management (OAM) has reviewed a significant source modification application from Hamilton Foundry & Machine Company, Decatur Casting Division, relating to the construction and operation of a castings cleaning machine connected to an existing baghouse for particulate matter control. The new castings cleaning machine replaces a castings cleaning machine which was at the end of its useful life.

History

On April 5, 1999 Hamilton Foundry & Machine Company, Decatur Casting Division, submitted an application to the OAM requesting to add a new castings cleaning machine to their existing gray iron foundry. The new castings cleaning machine will replace a castings cleaning machine that was at the end of its useful lifetime and it was removed from service on April 9, 1999. The baghouse used for the control of particulate matter from the previous machine will remain in service and it will be connected to the new machine for continued particulate matter control. The new castings cleaner will have a greater maximum capacity than that of the previous machine, increasing from 3.0 tons of gray iron castings cleaned per hour (previous machine) to 7.5 tons of gray iron castings cleaned per hour (new machine). An application for a Part 70 permit (T001-6264-00002) for this existing source was received on July 15, 1996.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

(a) One (1) Pangborn 34 CF Rotoblast castings cleaner with a maximum capacity of 7.5 tons of gray iron castings per hour, with particulate matter controlled by an existing baghouse identified as E3 exhausting at one (1) stack identified as S-8. This facility replaces the castings cleaner identified as Pangborn 14 CF Tumblast which had a maximum capacity of 3.0 tons of gray iron castings per hour, with particulate matter controlled by baghouse E3 exhausting at one (1) stack identified as S-8.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

The source applied for Part 70 Operating Permit T001-6264-00002 on July 15, 1996. The source has been operating under previous approvals including, but not limited to, the following:

(a) OP 01-07-87-0117, issued on March 8, 1984;

(b) CP 001-5004-00040, issued on May 15, 1996; and

(c) Amendment A 001-8892 to CP 001-5004-00040, issued on September 24, 1997.

Equipment removed from source covered under Operation Permit No. 01-07-87-0117, issued March 8, 1984:

(a) Pangborn 14 CF Tumblast castings cleaner with a maximum capacity of 3.0 tons of gray iron castings per hour. (Note: this facility was at the end of its useful lifetime and it is being replaced by the castings cleaner listed under **New Emission Units and Pollution Control Equipment**).

This facility was removed from service on April 9, 1999.

Enforcement Issue

There are no enforcement actions pending relating to this application.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
S8	new castings cleaner	18	29"x21"	14,000	70

Recommendation

The staff recommends to the Commissioner that the Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 5, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, page 1 of 1).

Potential To Emit for the New Pangborn 34 CF Rotoblast Castings Cleaner

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

	Potential To Emit (tons/year)
PM	558.5
PM-10	55.8
SO_2	0.0
VOC	0.0
CO	0.0
NO_x	0.0

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of particulate matter (PM) and particulate matter with an aerodynamic diameter at or below 10 microns (PM-10) are both equal to or greater than 25 tons per year. The source is subject to the provisions of 326 IAC 2-7, as discussed below, and a Part 70 permit application was submitted on July 15, 1996. Therefore, the source is subject to the provisions of 326 IAC 2-7-10.5 for this significant source modification.

(b) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive particulate matter (PM) emissions are counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Adams County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Adams County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Adams County has been designated as attainment or unclassifiable for PM-10. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the fugitive particulate matter (PM) emissions are counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	575
PM10	486
SO_2	81
VOC	95
CO	95
NO_x	26

(a) This existing source is a major stationary source because it is in one of the 28 listed source categories and at least one regulated pollutant is emitted at a rate of 100 tons per year or more.

(b) These emissions are based on existing source and proposed modification emissions, as taken from the Technical Support Document to Construction Permit CP 001-5004-00040, issued May 15, 1996.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emissions control and/or production limits, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO_2 (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO_x (ton/yr)
Proposed Modification	26.0	15.0	0.0	0.0	0.0	0.0
Contemporaneous Increases	0.0	0.0	0.0	0.0	0.0	0.0
Contemporaneous Decreases*	1.1	0.1	0.0	0.0	0.0	0.0
Net Emissions	24.9	14.9	0.0	0.0	0.0	0.0
PSD or Offset Significant Level	25	15	40	40	100	40

* Refers to the castings cleaner identified as Pangborn 14 CF Tumblast which had a maximum capacity of 3.0 tons of gray iron castings per hour. This facility was removed from service on April 9, 1999 and it was covered under Operation Permit No. 01-07-87-0117, issued March 8, 1984.

(a) This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T001-6264-00002) application on July 15, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 61) applicable to this source modification.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 20 and 40 CFR Part 63) applicable to this source modification.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source shall prepare and maintain a Preventive Maintenance Plan (PMP) for the casting cleaning facility and its control device within ninety (90) days after issuance of this approval. The PMP shall be prepared pursuant to the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan) because this facility has a control device and the allowable PM emissions exceed 10 pounds per hour (see Appendix A, page 1 of 1). Current OAM policy requires facilities meeting these criteria to comply with 326 IAC 1-6-3.

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to 326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration, PSD), this proposed modification is not considered a major modification because, even though the source is an existing major stationary source and it is one of the 28 listed source categories (i.e., iron and steel mill source category), the proposed modification has the potential to emit less than applicable PSD significant emission levels for any regulated pollutant. Therefore, the PSD rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because the source has the potential to emit more than one hundred (100) tons per year of PM-10. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

State Rule Applicability - Individual Facilities

326 IAC 2-1.1-11 (Compliance Requirements)

Pursuant to the requirements of 326 IAC 2-1.1-11, an initial compliance stack test shall be conducted within 60 days after achieving the maximum production rate, but no later than 180 days after initial start-up. The Permittee shall perform PM and PM-10 testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner, to demonstrate compliance with the allowable PM and PM10 emission limits (i.e., Conditions D.1.1 and D.1.2. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures).

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the Pangborn 34 CF Rotoblast castings cleaner shall not exceed 15.8 pounds per hour when operating at a process weight rate of 7.5 tons of metal per hour, as determined with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

The baghouse E3 shall be in operation at all times the castings cleaner is in operation in order to comply with this limit.

326 IAC 8-1-6 (New Facilities; General VOC Reduction Requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have a PTE VOC at 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8. The castings cleaning operation is not regulated under any other provision of Article 8, nor does the facility have a PTE VOC at 25 tons per year or more. Therefore, 326 IAC 8-1-6 is not applicable to this source.

There are no other 326 IAC Article 8 rules applicable to this source modification.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The Pangborn 34 CF Rotoblast castings cleaner has applicable compliance monitoring conditions as specified below:

    (a) Visible Emissions Notations

        (i) Daily visible emission notations of the baghouse E3 stack exhaust shall be performed at least once per shift during normal daylight operations when the castings cleaner is operating and exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(ii) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(iii) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(iv) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(v) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

(b) Parametric Monitoring
The Permittee shall record the total static pressure drop across baghouse E3 at least once per shift during normal daylight hours when the Pangborn 34 CF Rotoblast castings cleaner is in operation and when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

(c) Baghouse Inspections
An inspection shall be performed each calendar quarter of all bags controlling the Pangborn 34 CF Rotoblast castings cleaner when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

(d) Broken or Failed Bag Detection
In the event that bag failure has been observed:

(i) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).

(ii) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).

These monitoring conditions are necessary because the baghouse for the Pangborn 34 CF Rotoblast castings cleaner must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

None of the listed air toxics will be emitted from this significant modification to the source.

Conclusion

The construction and operation of the new castings cleaning machine connected to an existing baghouse for particulate matter control shall be subject to the conditions of the attached proposed **Significant Source Modification Permit No. SSM 001-10839-00002**.

Appendix A: Secondary Metal Production
Gray Iron Foundry
Company Name: Hamilton Foundry & Machine Company
Decatur Casting Division
Address City IN Zip: 822 Dayton Avenue, Decatur, Indiana 46733
Significant Source Modification No.: 001-10839-00002
Part 70 Permit No.: T 001-6264-00002
Reviewer: Michael Hirtler / EVP
Date: April 9, 1999

Grinding/Cleaning (SCC# 3-04-003-40) - Potential to Emit for Proposed New Pangborn 34 CF Rotoblast Castings Cleaner Rated at 7.5 Tons Castings Per Hour

Type of Material: Iron | Maximum Throughput (ton/hr): 7.5

	PM lbs/ton metal	PM10 lbs/ton metal	SOx lbs/ton metal	NOx lbs/ton metal	VOC lbs/ton metal	CO lbs/ton metal	Lead lbs/ton metal
	17	1.7	0.00	0.00	0.0	0.0	0.0
Uncontrolled Potential Emissions (lbs/hr)	127.5	12.8	0.0	0.0	0.0	0.0	0.0
Uncontrolled Potential Emissions (ton/yr)	558.5	55.8	0.0	0.0	0.0	0.0	0.0
Control Efficiency (%)	98.0%	98.0%	0.0%	0.0%	0.0%	0.0%	98.0%
Controlled Potential Emissions (lb/hr)	2.5	0.3	0.0	0.0	0.0	0.0	0.0
Controlled Potential Emissions (ton/yr)	11.2	1.1	0.0	0.0	0.0	0.0	0.0

Grinding/Cleaning (SCC# 3-04-003-40) - Contemporaneous Emissions Decrease from Removal of Existing Pangborn 14 CF Tumblast Castings Cleaner Rated at 3.0 Tons Castings Per Hour

Type of Material: Iron | Average Actual Throughput (ton/yr): 6402

	PM lbs/ton metal	PM10 lbs/ton metal	SOx lbs/ton metal	NOx lbs/ton metal	VOC lbs/ton metal	CO lbs/ton metal	Lead lbs/ton metal
	17	1.7	0.00	0.00	0.0	0.0	0.0
Control Efficiency (%)	98.0%	98.0%	0.0%	0.0%	0.0%	0.0%	98.0%
Actual Emissions (ton/yr)	1.1	0.1	0.0	0.0	0.0	0.0	0.0

Compliance Calculations:

326 IAC 2-2 and 40 CFR 52.21

This source is an existing major stationary source pursuant to 326 IAC 2-2 and 40 CFR 52.21. The potential to emit PM and PM10 from the proposed castings cleaner (uncontrolled, ton/yr), exceeds the respective significant emissions thresholds of 25 tons/yr and 15 tons/yr. The source will comply by controlling their emissions using existing baghouse, E3. To make the permit federally enforceable, the following emission limits (expressed as pounds of PM or PM10 per ton of castings cleaned, i.e., lb/ton) will be applied as the allowable emission limits of the permit:

PM: The PSD significant emissions threshold of 25 tons/yr is set to 26.0 tons/yr to account for the contemporaneous emission decrease associated with the removal of existing Pangborn 14 CF Tumblast castings cleaner. At the maximum rated production for the proposed unit (7.5 tons castings/hr * 8760 hr/yr = 65,700 tons), the limited emission factor (EF) is:

Allowable EF (lb PM/ton castings) = 26.0 (tons PM / yr) * (2000 lb/ton * yr/8760 hr) / 7.5 (ton castings / hr)
= 0.791 lb PM / ton castings
= 5.9 lb PM / hr equivalent at 7.5 ton per hour rating of castings cleaner

Controlled Potential to Emit = 2.5 lb PM/hr based on stated baghouse control efficiency - will comply

PM10: The PSD significant emissions threshold of 15 tons/yr (the 0.1 tons/yr contemporaneous emission decrease associated with the removal of existing Pangborn 14 CF Tumblast castings cleaner is not considered here). At the maximum rated production for the proposed unit (7.5 tons castings/hr * 8760 hr/yr = 65,700 tons), the limited emission factor (EF) is:

Allowable EF (lb PM10/ton castings) = 15.0 (tons PM10 / yr) * (2000 lb/ton * yr/8760 hr) / 7.5 (ton castings / hr) =
= 0.457 lb PM10 / ton castings
= 3.4 lb PM10 / hr equivalent at 7.5 ton per hour rating of castings cleaner

Controlled Potential to Emit = 0.3 lb PM10/hr based on stated baghouse control efficiency - will comply

326 IAC 6-3-2 (Process Operations)

The proposed castings cleaning operation is subject to the particulate matter (PM) emission limitation pursuant to 326 IAC 6-3-2 for process operations. Pursuant to the rule requirements, the allowable particulate matter emission rate, E (expressed in lb/hr), is determined as follows:

E = 4.10 P^0.67 for process weight rates (P, expressed in tons/hour) up to 30 tons
E = 4.10 (7.5)^0.67 = 15.8 lb/hr (allowable)

Controlled Potential to Emit = 2.5 lb PM10/hr based on stated baghouse control efficiency - will comply

Notes:
(1) Emission Factors from AP 42, Chapter 12.10, Table 12.10-7, SCC #3-04-003-40
(2) Uncontrolled Potential Emissions (lb/hr) = Emission Factor (lb/ton) * Material throughput (ton/hr)
(3) Uncontrolled Potential Emissions (ton/yr) = Potential Emissions (lb/hr) * 8760 (hr/yr) * (1/2000 ton/lb)
(4) Controlled Potential Emissions (ton/yr) = Uncontrolled Potential Emissions (ton/yr) * (1 - control efficiency)
(5) Actual Emissions (ton/yr) = Emission Factor (lb/ton) * Actual throughput (ton/yr) * (1 - control efficiency) / 2000 (lb/ton)
where the actual throughput reflects 10,670 tons castings produced per year, averaged over 1997 & 1998, multiplied by 60%, since this is the approximate average amount of castings cleaned in the existing Pangborn 14 CF tumblast (the remaining 40% is distributed to 2 other existing castings cleaners)